

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/837,483	04/19/2001	Hiroyuki Oka	K-1973	9920
32628	7590 07/05/2005		EXAMINER	
	N KANESAKA BERNE	KING, BRADLEY T		
	700 DIAGONAL RD (A, VA 22314-2848		ART UNIT	PAPER NUMBER
715571111510	,		3683	
			DATE MAILED: 07/05/200	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	·						
•		Application No.	Applicant(s)				
Office Action Summary		09/837,483	OKA ET AL.				
		Examiner	Art Unit				
		Bradley T. King	3683				
Period fo	The MAILING DATE of this communication a or Reply	ppears on the cover	sheet with the correspondence a	address			
A SH THE - Exte after - if the - if NC - Failu Any	ORTENED STATUTORY PERIOD FOR REF MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. a period for reply specified above is less than thirty (30) days, a round for reply is specified above, the maximum statutory perior to reply within the set or extended period for reply will, by state reply received by the Office later than three months after the material patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, howevely within the statutory mining of will apply and will expire Solute, cause the application to be	er, may a reply be timely filed num of thirty (30) days will be considered tim X (6) MONTHS from the mailing date of this become ABANDONED (35 U.S.C. § 133).				
Status			·				
1)⊠	Responsive to communication(s) filed on 28	March 2005.					
·	This action is FINAL . 2b) ☐ This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
5)□ 6)⊠ 7)□	Claim(s) 1,2 and 4-21 is/are pending in the application. 4a) Of the above claim(s) 4-8,12,19 and 21 is/are withdrawn from consideration. Claim(s) is/are allowed. Claim(s) 1,2,9-11,13-18 and 20 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or election requirement.						
Applicat	ion Papers						
10)	The specification is objected to by the Examination The drawing(s) filed on is/are: a) and a Applicant may not request that any objection to the Replacement drawing sheet(s) including the community of the oath or declaration is objected to by the	ccepted or b) obje ne drawing(s) be held in ection is required if the	n abeyance. See 37 CFR 1.85(a). drawing(s) is objected to. See 37	CFR 1.121(d).			
Priority (under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
Attachmen	• •	(1					
2)	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/0 or No(s)/Mail Date)8) 5) D	nterview Summary (PTO-413) aper No(s)/Mail Date lotice of Informal Patent Application (P ther:	TO-152)			

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2, 9-11, 13-18, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "said travel modulating piston, in providing same braking force" and "to provide substantially same travel amounts in a braking actuation when the regenerating braking system applies the braking force together with the service braking system and in a braking actuation when the service braking system without the regenerating braking system only apples the braking force". These limitations are generally awkward and confusing, and their meaning is not clear.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 09/837,483

Art Unit: 3683

Claims 1-2, 9-11, 13-18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willmann et al (US#5853229) in view of Seibert et al (US#4730877).

Willmann et al disclose a braking system including; a master cylinder having an input shaft which travels according to travel of a brake operational member by the braking operation, a master cylinder pressure chamber, and a master cylinder piston which develops master cylinder pressure in the master cylinder pressure chamber according to a travel of the input shaft (the structure is inherent to master cylinders), a brake force control device having a pump 136 controlling, in a service braking operation, a discharge pressure of the pump according to the operational conditions of the service braking system and the regenerative braking system, a controller for operating the pump according to the master cylinder pressure, said pump, upon operation by the controller, sucking brake fluid from the master cylinder pressure chamber and discharging the brake fluid at the discharge pressure controlled by the braking force control device (see connection 176), a wheel cylinder 104 for receiving the brake fluid at the discharge pressure controlled by the braking force control device and generating a braking force. Willmann et al lack a travel modulator. Seibert et al disclose a similar braking system and further teach a travel modulating device 37 controlled by the discharge pressure of a pump to control the operational characteristics of the modulator, thereby allowing consistent pedal feel and travel. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the travel modulator taught by Seibert et al in the system of Willmann et al to reduce the size and manufacturing efforts (see column 1, lines 60-65 of Seibert et al) and provide a degree

Art Unit: 3683

of adjustability of the travel characteristics of the master cylinder (column 2, lines 17-22), increasing driver comfort.

Regarding claims 10-11, Siebert et al disclose a modulating piston 38 having different diameter piston portions.

Regarding claim 13, Siebert et al disclose biasing means 39.

Regarding claim 14, Siebert et al disclose metal seals (interpreted in light of the instant disclosure) on both piston portions.

Regarding claims 16-17, Willmann et al symbolically disclose a brake pressure intensifying device (pneumatic booster near reference number 100). The features of claim 17 are inherent to conventional vacuum boosted master cylinders.

Response to Arguments

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). It is also not clear from Applicant's arguments which features are lacking in the proposed combination.

Conclusion

Page 5

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T. King whose telephone number is (571) 272-7117. The examiner can normally be reached on 11:00-7:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 09/837,483

Art Unit: 3683

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BTK

ROSERT A. SICONOLF

Page 6